REMARKS

Reconsideration and the timely allowance of the pending claims, in view of the following remarks, are respectfully requested.

In the Final Office Action dated August 10, 2004, claims 1 and 4 were rejected under 35 U.S.C. § 102(b) as being anticipated by Li et al. (US Patent No. 5,772,771); claims 6-7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Li et al. in view of Tomoyasu et al. (US Pat. No. 5,900,103); claims 6-7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Li et al. in view of Tomoyasu et al. (US Pat. No. 5,900,103); claims 14-15, 21 and 24-25 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over Li et al. (US Pat. No. 5,772,771); claims 17 and 18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Li et al. (US Pat. No. 5,772,771) and further in view of Tomoyasu et al.; claims 22 and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Li et al. (US Pat. No. 5,772,771) and further in view of Suzuki et al. (U.S. Patent No. 5,522,934); claims 1, 4, 6-7, 14-15 and 17-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tomoyasu et al. in view of Li et al.; and claims 21-25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tomoyasu et al. in view of Li et al. and further in view of Suzuki et al.

By this Amendment, claims 1, 4, 6-15 and 17-25 have been cancelled herein without prejudice or disclaimer to the subject matter contained therein. Claims 26-43 have been added and are currently presented for examination of which claims 26, 33, and 37 are the sole independent claims. Applicants submit that no new matter has been introduced and that support for the new claim language may be found throughout the initial disclosure, for example, in the drawings and in the detailed description.

With claims 1, 4, 6-15 and 17-25 having been cancelled, Applicants submit that all prior art rejections, under 35 U.S.C. §102(b) and §103(a), have been rendered moot. However, to the extent that the Examiner considers sustaining the rejections relative to new claims 26-43, Applicants respectfully point out the distinctions between the new claims and the applied art as follows:

Independent claim 26 sets forth a plasma processing apparatus, comprising, *inter-alia*:

> a ***gas introducing portion*** configured to introduce a gas into the process chamber . . .
>
> wherein the gas introducing portion comprises:
>
> a plurality of gas nozzles;
>
> an ***inlet port through which the gas is introduced into the gas nozzles***; and
>
> an ***outlet port through which the gas is evacuated from the gas nozzles, the outlet port having a diameter larger than a diameter of the gas nozzles.***

As described relative to the disclosed embodiments and as positively recited in claim 26, the outlet port of the gas introducing portion has a diameter larger than the diameter of the gas nozzles. Such a configuration enables gases and water components that may be present in the gas introducing portion to be evacuated much more efficiently than through the gas nozzles with a first vacuum device provided to the process chamber. That is, by having the outlet port with a larger diameter, a second vacuum device or a bypass provided to the gas introducing portion can be used in conjunction with the outlet port to provide more effective evacuation. (*See, e.g.*, Specification: page 20, line 5 – page 21, line 3: FIGs. 1, 6A, 6B).

Unlike the present invention, however, there is nothing in any of the applied references that teach or suggest the combination of features recited in claim 26. In particular, the Li et al. reference discloses a cleaning operation that comprises closing a valve **78**, introducing cleaning gas into vacuum chamber **18**, opening shutoff valve **88**, and slowly drawing the cleaning gas into nozzles **34** through orifices **38**, back through manifold **36** and along line **82** through the operation of vacuum pump **84**. (*See*, Li et al.: col. 4, lines 49-59; FIG. 5). With this said, there is nothing in Li et al. that remotely teaches the use of a gas introducing portion having an outlet port through which the gas is evacuated from the gas nozzles in which the outlet port has a diameter larger than the diameter of the gas nozzles, as required by claim 26.

Regarding the Tomoyasu et al. reference, Tomoyasu et al. merely discloses the use of a vaporizer **732A** made integral to an upper electrode **730A** of the process chamber **710A** with an intermediate chamber **770** formed under it. The vaporizer housing **742A** includes a gas outlet side **774** in which a plurality of apertures **772** are formed. A gas pipe **776** is communicated with the intermediate chamber **770** in the upper electrode **730A** to introduce second gas and a bypass **750A** extends from that portion of the upper electrode **730A** (which is opposed to the gas pipe **776**) to exhaust unnecessary gas from the upper electrode **730A**. (*See*, Li et al.: col. 18, lines 10-25; FIG. 37). Tomoyasu et al. fails, however, to teach the use of a gas introducing portion having an outlet port through which the gas is evacuated from the gas nozzles in which the outlet port has a diameter larger than the diameter of the gas nozzles, as required by claim 26.

Equally deficient, the Suzuki et al. reference discloses a plasma apparatus including a plurality of gas supply nozzles having process injection holes formed at a plurality of levels in the process chamber of the plasma apparatus. The holes located at an upper level are closer to a center of a target surface than gas injection holes located at a lower level. There is, however, nothing in Suzuki et al. that teaches the use of a gas introducing portion having an outlet port through which the gas is evacuated from the gas nozzles in which the outlet port has a diameter larger than the diameter of the gas nozzles, as required by claim 26.

For at least these reasons, Applicants submit that none of the applied references, whether taken alone or in reasonable combination, teach the claimed combination of elements recited by amended claim 26. Accordingly, Applicants respectfully submit that claim 26 is patentable over these references. Moreover, because claims 27-32 depend from claim 26, claims 27-32 are patentable by virtue of dependency as well as for their additional recitations.

In addition, because independent claims 33 and 37 recite similar features to claim 26, claims 33 and 37 are patentable for at least the reasons given with respect to claim 26. Further, because claims 34-36 depend from claim 32 and claims 38-43

depend from claim 37, claims 34-36 and claims 38-43 are patentable by virtue of dependency as well as for their additional recitations.

All matters having been addressed and in view of the foregoing, Applicant respectfully requests the entry of this Amendment, the Examiner's reconsideration of this application, and the immediate allowance of all pending claims.

Applicants' Counsel remains ready to assist the Examiner in any way to facilitate and expedite the prosecution of this matter. Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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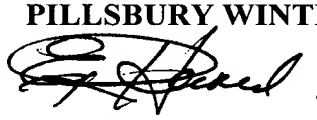

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